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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,272	05/25/2006	Nobuhiro Nakamura	2257-0259PUS1	5982

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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RILEY, SHAWN

ART UNIT	PAPER NUMBER
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2838

NOTIFICATION DATE	DELIVERY MODE
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06/30/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/580,272	NAKAMURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shawn Riley	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>may06/aug06</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The summary of the invention, at paragraphs 14 –33, and paragraphs 36-42 should not be written in the grammar and language of the claims and in extensive detail as already addressed in the claims. It is recognized that Applicant's wish to provide a basis of matter in the specification to avoid, *inter alia*, a new matter rejection. However, once recited (i.e., when first filed) in the original application's claims, a first paragraph U.S.C. 112 rejection based on lack of written description (or enablement or best mode for that matter) would not be proper. The written description is not the place to introduce the legal phraseology of the claims. The specification (other than the claims) should be written so that the average person who is skilled in the art (not in legal nuances) would be aided by reading the information.

More particularly, since the purpose of the brief summary of invention is to apprise the public, and more especially those interested in the particular art to which the invention relates, of the nature of the invention, the summary should be directed to the specific invention being claimed, in contradistinction to mere generalities which would be equally applicable to numerous preceding patents. That is, the subject matter of the invention should be described in one or more clear, concise sentences or paragraphs.

The brief summary, if properly written to set out the exact nature, operation, and purpose of the invention, will be of material assistance in aiding ready understanding of

the patent in future searches. The brief summary should be more than a mere statement of the objects of the invention, which statement is also permissible under 37 CFR 1.73.

Appropriate correction is required.

Further, a brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed. Since the purpose of the brief summary of invention is to apprise the public, and more especially those interested in the particular art to which the invention relates, of the nature of the invention, the summary should be directed to the *specific invention* being claimed, in *contradistinction to mere generalities* which would be equally applicable to numerous preceding patents. That is, the subject matter of the invention should be described in one or more clear, concise sentences or paragraphs. Stereotyped general statements that would fit one case as well as another serve no useful purpose and may well be required to be canceled as surplusage, and, in the absence of any illuminating statement, replaced by statements that are directly in point as applicable exclusively to the case in hand.

Appropriate correction is required.

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Aug. 21, 2007

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FIG. 7

(PRIOR ART)

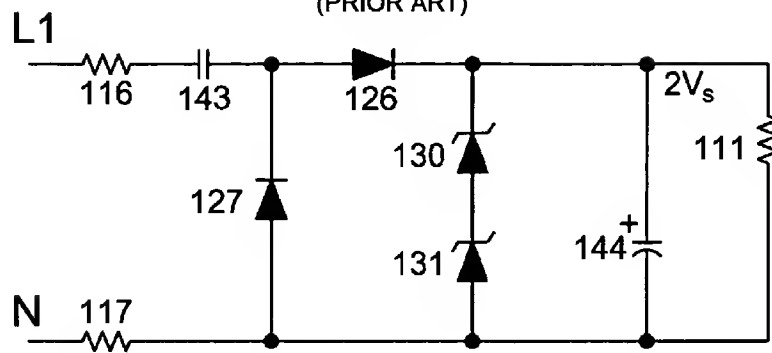
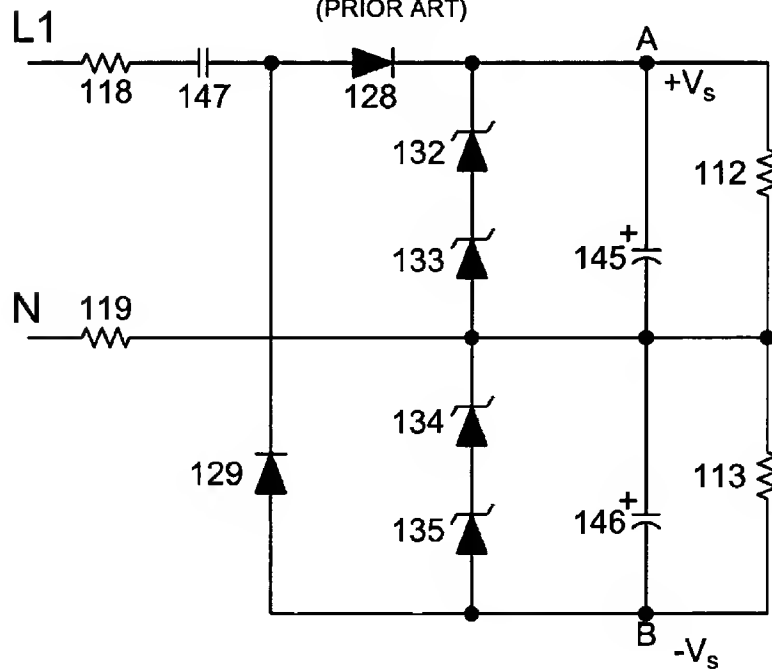


FIG. 8

(PRIOR ART)



***Claim Rejections - 35 U.S.C. § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 3718 of this title before the invention thereof by the applicant for patent.

2. Claims 1-3, 5-7, 11, and 13 are rejected under 35 U.S.C. §102(e) as being fully anticipated by Momber (U.S. Patent 7,259,479). Momber shows,<sup>1</sup> (in, e.g., the(ir) figures 7-8 and corresponding disclosure)

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<sup>1</sup> Note claims will be addressed individually and the material in parentheses are the examiner's annotated comments. Further unless needed for clarity reasons, recited limitation(s), will be annotated only upon their first occurrence. Claims that are not annotated are seen as having already had the invention(s) addressed previously in an annotated claim and may be repeated for convenience of the applicant/examiner. Bolded words/phrases indicate rejected material based 112 paragraph rejections. Underlined words/phrases indicate objected to material. For method claims, note that under MPEP 2112.02, the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

As to claim 1;

A power converter for stepping down and converting AC voltage to DC voltage, said power converter comprising: first and second input connections (L1 & N) for inputting output of said AC voltage; a first capacitor (143) and a second capacitor (144) interposed in series on a first electric connection line between said first input connection and said second input connection, connection in order from a side of said first input connection; a first diode (126) interposed between the first capacitor and said second capacitor on said first electric connection line so that its forward direction is toward said second input connection; a second diode (127) interposed on a second electric connection line so that its reverse direction is toward said second input connection, said second electric connection line connecting a point between said first capacitor and said first diode on said first electric connection line, and said second input connection; a first output connection (at, e.g.,  $2V_s$ ) for output of said DC voltage, which is connected between said first diode and said second capacitor on said first electric connection line; and a second output connection (connection node between 111 and 144) for output of said DC voltage, which is connected to said second input connection.

As to claim 2;

The power converter as set forth in claim 1, further comprising: a Zener diode (130/131) interposed between said first output connection and said second output connection so that its forward direction is toward said first output connection.

As to claim 3;

The power converter as set forth in claim 2, further comprising: a resistor (TH) interposed on said first electric connection line on a side closer to said first input connection than a position of connection with said second electric connection line (this line connection could be any second connection input/output apparently).

As to claim 5;

The power converter as set forth in claim 3, further comprising: a third capacitor (figure 8-146) connected between one end of said resistor (118) and said second input connection (N),

As to claim 6;

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The power converter as set forth in claim 5, wherein said one end of said resistor (118) is the end on the side of said second input connection.

7. The power converter as set forth in claim 5, wherein said one end of said resistor is the end on the side of said first input connection,

As to claim 11;

The power converter as set forth in claim 1, further comprising: a resistor (116) interposed on said first electric connection line on a side closer to said first input connection than a position of connection with said second electric connection line.

13. The power converter as set forth in claim 11, further comprising: a third capacitor connected between one end of said resistor resistance and said second input connection,

.

***Claim Rejections - 35 U.S.C. § 103***

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

4. Claims 4, 8-10, 12 and 14-19 are rejected under 35 U.S.C. § 103 as being unpatentable over Momber (U.S. Patent 7,259,479). The Momber reference discloses the limitations of the invention as claimed as described above. However, Momber does not



show the resistance as a thermistor or the ratio of the capacitances to each other. It would have been obvious at the time the invention was made to utilize thermistor or the ratio of the capacitances to each other into the circuit of Momber for the reason of a design choice, wherein, e.g., the use of a thermistor could provide protection by reducing current overload by the well know protection mechanism of increasing the resistance of the element/resistance as the device heated up do to increased current, and likewise the setting of different ratio's of the capacitance is within the skill of a designer for such reasons as providing a storage means for excess voltage/power or even a filtering means.

***Allowable Subject Matter***

5. No claims are allowable over the prior art of record.

***Conclusion***

**N.B.** Any inquiry from other than the applicant/attorney of record (~~THAT INCLUDES SECRETARIAL AND ANY OTHER TYPE OF SUPPORT STAFF~~) concerning this communication or earlier communications from the Examiner should be directed to the Patent Electronic Business Center (EBC) at 1.866.217.9197.

Any inquiry from a member of the press concerning this communication or earlier communications from the Examiner or the application should be directed to the Office of Public Affairs at 703.305.8341. Any inquiry from the applicant or an attorney of record concerning this communication or earlier communications from the Examiner should be directed to Examiner Riley whose telephone number is 571.272.2083. The Examiner can normally be reached Monday through Thursday from 7:30-6:00 p.m. Eastern Standard Time. The Examiner's Supervisor is Akm Ullah can be reached on 571-272-2361. Any inquiry about a case's location, retrieval of a case, or receipt of an amendment into a case or information regarding sent correspondence to a case **should be directed to 2800's Customer Service Center** at 571.272.2815. Any papers to be sent by fax MUST BE sent to fax number **571-273-8300**. Any inquiry of a general nature of this application should be **directed to the Group receptionist** whose telephone number is 571.272.2800. Status

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information of cases may be found at <http://pair-direct.uspto.gov> wherein unpublished application information is found through private PAIR and published application information is found through public PAIR. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Further help on using the PAIR system is available at 1.866.217.9197 (Electronic Business Center). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 08

/Shawn Riley/  
***Primary Examiner AU 2838***